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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,327

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EXAMINER

ANYA, CHARLES E

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,327

Applicant(s)

CHAMBLISS ET AL.

Examiner

Charles E. Anya

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/26/03.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. Claims 1-30 are pending in this application.

Claim Objections

2. **Claims 2- are objected to because of the following informalities:**

Claims 2-7,9-13,15-19 and 21-25 appear to include typographical errors.

Specifically, “,” is omitted before “wherein” on line of the respective claims.

For the purpose this office action the Examiner would insert “,” before “wherein” on line of the respective claims.

Claims 15-18 appear to include typographical errors. Specifically, claims 15-18 seems to have been wrongly made on claims 8 and 10.

For the purpose of this office action the examiner would change the claims as follows:

“claim 8” to “claim 14” on line 1 of claims 15,16 and 18.

“claim 10” to “claim 16” on line 1 of claim 17.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-13 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 8-13 and 28 are directed to a mailbox, which is software per se and therefore neither a process, machine, manufacture nor composition of matter. In contrast, a claimed computer-readable storage medium encoded with a mailbox is a computer element with defined structural and function interrelationships between the mailbox and the rest of the computer which permit the mailbox's functionality to be realized, and is thus statutory. Accordingly, appropriate correction or amendment is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5, 12 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2194

Specifically, as per Examiner understanding of the is invention as described in the specification and the claimed invention "the first process" is the caller rather than the callee. However, claims 5,12 and 18 seem to suggest otherwise.

For the purpose of this office action the Examiner would change "the first process" on lines 1 and 2 of claim 5 and line 1 of claims 12 and 18 to "the second process".

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack antecedent basis:

i. "the medium" on line 1 of claim 1.

For the purpose of this office action the Examiner would change "the medium" to "the program storage device".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 8-10,12-16,18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 20030037178 A1 to Vessey et al.

10. As to claim 8, Vessey teaches a mailbox for providing a two-step communication scheme, comprising a shared memory configured for establishing at least one mailslot (“...shared memory window...” page 20 paragraph 0274 figures 22/23 Shared Memory 160, figure 34 Shared Memory 3460), access to a mailslot being granted exclusively to a first process for modification of contents of the mailslot to facilitate inter-process communication (“...acquires ...lock...” page 26 paragraph 0354).

11. As to claim 9, Vessey teaches the mailbox of claim 8, wherein the mailslot comprises a header having an operation code and a parameter region interpreted according to the operation code (figure 19 page 20 paragraph 0278).

12. As to claims 10, Vessey teaches the mailbox of claim 8, wherein the first process comprises a caller, the caller accessing the mailslot by placing content into the mailslot (figure 31A (Step 3118) page 26 paragraph 0355).

13. As to claim 12, Vessey teaches the mailbox of claim 8, wherein a second process comprises a callee, and further comprises placing results from the callee into the mailslot by a callee (page 39 paragraph claim 20(d)).

14. As to claim 13, Vessey teaches the mailbox of claim 8, further being configured for exclusive access of the mailslot second process after the first process notifies the second process to check the mailslot (Step 3120 – Step 3123 “...Send Signal interface...” page 26 paragraphs 0355/0356, “...Signal...” page 27 paragraph 0360) and releases exclusive access to the mailslot (Step 3131/Step 3133 page 26 paragraphs 0355/0356).

15. As to claim 14, Vessey teaches a system, comprising: a first process (“...client...” page 20 paragraph 0274, figure 22 Partition 2202a (APP1 2208a), figure 34 Partition 1); a second process (figure 22 Partition 2202n (APP1 2208n), figure 34 Partition 2); a mailbox, disposed between the first and second process (“...shared memory window...” page 20 paragraph 0274 figures 22/23 Shared Memory 160, figure 34 Shared Memory 3460), the mailbox comprising a shared memory configured for establishing at least one mailslot, access to a mailslot being granted exclusively to the first process for modification of contents of the mailslot to facilitate inter-process communication (“...acquires ...lock...” page 26 paragraph 0354).

16. As to claim 15, Vessey teaches the system of claim 8 wherein the mailslot comprises a header having an operation code and a parameter region interpreted according to the operation code (figure 19 page 20 paragraph 0278).

Art Unit: 2194

17. As to claim 16, Vessey teaches the system of claim 14, wherein the first process comprises a caller, the caller accessing the mailslot by placing content into the mailslot (figure 31A (Step 3118) page 26 paragraph 0355).

18. As to claim 18, Vessey the system of claim 14, wherein a second process comprises a callee, and further comprises placing results from the callee into the mailslot by a callee (page 39 paragraph claim 20(d)).

19. As to claim 19, Vessey teaches the system of claim 18, wherein the mailbox is configured for exclusive access of the mailslot by the second process after the first process notifies the second process to check the mailslot (Step 3120 – Step 3123 “...Send Signal interface...” page 26 paragraphs 0355/0356, “...Signal...” page 27 paragraph 0360) and releases exclusive access to the mailslot (Step 3131/Step 3133 page 26 paragraphs 0355/0356).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2194

21. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 7,020,697 B1 to Goodman et al. in view of U.S. Pub. No. 20030037178 A1 to Vessey et al.

22. As to claim 1, Goodman teaches a program storage device readable by a computer, the program storage device tangibly embodying one or more programs of instructions executable by the computer to perform a method for providing a two-step communication scheme (figure 8 Col. 82 Ln. 4 – 67 – Col. 88 Ln. 1 – 10), the method comprising: accessing the mailslot by the first process to modify the contents of the mailslot to facilitate inter-process communication (Message queuing...store..." Col. 85 Ln. 24 – 37, Col. 86 Ln. 51 – 56).

Goodman is silent with reference to establishing for a first process exclusive access to a mailslot in a mailbox shared by a plurality of processes.

Vessey teaches establishing for a first process exclusive access to a mailslot in a mailbox shared by a plurality of processes ("...acquires...lock..." page 26 paragraph 0354).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vessey and Goodman because the teaching of Vessey would improve the system of Goodman by providing a locking mechanism for locking shared memory in order to facilitate greater throughput between partitions, since contention for system lock is eliminated (Vessey page 22 paragraph 0307).

23. As to claim 2, Vessey teaches the program storage device of claim 1, wherein the mailslot comprises header having an operation code and a parameter region interpreted according to the operation code (figure 19 page 20 paragraph 0278).

24. As to claim 3, Goodman teaches the program storage device of claim 1, wherein the first process comprises a caller and wherein the accessing the mailslot by the first process to modify the contents of the mailslot further comprises placing content into the mailslot by a caller (Message queuing...store..." Col. 85 Ln. 24 – 37).

25. As to claim 4, Goodman teaches the program storage device of claim 3, wherein the placing content into the mailslot by the caller comprises a remote procedure call (Remote Procedure Call (RPC) 192 Col. 83 Ln. 54 – 60, Col. 84 Ln. 29 – 49).

26. As to claim 5, Vessey teaches the program storage device of claim 1, wherein a second process comprises a callee and further comprises placing results from the callee into the mailslot by a callee (page 39 paragraph claim 20(d)).

27. As to claim 6, Vessey teaches the program storage device of claim 1 further comprising notifying a second process to check the mailslot ("...Signal..." page 23 paragraph 0322, "Send Signal..." page 24 paragraph 0349, Step 3120 – Step 3123 "...Send Signal interface..." page 26 paragraphs 0355/0356, "...Signal..." page 27

Art Unit: 2194

paragraph 0360) and releasing exclusive access by the first process to the mailslot (Step 3131/Step 3133 page 26 paragraphs 0355/0356).

28. As to claim 7, Vessey teaches the program storage device of claim 6, further comprising: establishing for a second process exclusive access to the mailslot; and accessing the mailslot by the second process to retrieve the contents of the mailslot to facilitate inter-process communication (“...ownership rights...” page 27 paragraph 0360).

29. Claims 20-22 and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,804,714 B1 to Tummalapalli in view of U.S. Pub. No. 20030037178 A1 to Vessey et al.

30. As to claim 20, Tummalapalli teaches a service level agreement (SLA) server, comprising: a plurality of processes, the plurality of processes comprising a database manager for managing performance data (“...concurrent processing server...” Col. 5 Ln. 45 – 65, Col. 7 Ln. 1 – 6), an application server for collecting performance data (Data Collection Components 204 Col. 5 Ln. 25 – 36, Col. 6 Ln. 14 – 40, Ln. 60 – 67, Col. 7 Ln. 1 – 20) and providing a client interface for establishing service level agreements (User Layer Tool 236/Service Reports Tool 234 Col. 8 Ln. 45 – 53), a SLA core for analyzing data and controlling actions based on service level agreements and policy (“...concurrent processing managers...” Col. 5 Ln. 45 – 67, Col. 6 Ln. 66 – 67, Col. 7

Ln. 1 – 20) and a performance monitor daemon for communicating with remote I/O service gateways to collect data and send throttling requests (“Database performance monitor...” Col. 6 Ln. 42 – 59).

Vessey teaches a shared memory forming a mailbox, the mailbox being used for a two-step communication scheme between a first process and a second process, the mailbox configured for establishing at least one mailslot (“...shared memory window...” page 20 paragraph 0274 figures 22/23 Shared Memory 160, figure 34 Shared Memory 3460), access to a mailslot being granted exclusively to a first process for modification of contents of the mailslot to facilitate inter-process communication (“...acquires ...lock...” page 26 paragraph 0354).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Vessey and Tummalapalli because the teaching of Vessey would improve the system of Tummalapalli by providing a locking mechanism for locking shared memory in order to facilitate greater throughput between partitions, since contention for system lock is eliminated (Vessey page 22 paragraph 0307).

31. As to claim 21, Vessey teaches the SLA server of claim 20, wherein the mailslot comprises a header having an operation code and a parameter region interpreted according to the operation code (figure 19 page 20 paragraph 0278).

Art Unit: 2194

32. As to claim 22, Vessey teaches the SLA server of claim 20, wherein the first process comprises a caller, the caller accessing the mailslot by placing content into the mailslot (“...stored...” page 20 paragraph 0274, “...insert...” page 26 paragraph 0349).

33. As to claim 24, Vessey teaches the SLA server of claim 20, wherein the second process comprises a callee, the callee accessing the mailslot for placing into the mailslot (page 39 paragraph claim 20(d)).

34. As to claim 25, Vessey teaches the SLA server of claim 20 wherein the mailbox is configured for exclusive access of the mailslot by the second process after the first process notifies the second process to check the mailslot (“...Signal...” page 23 paragraph 0322, “Send Signal...” page 24 paragraph 0349, Step 3120 – Step 3123 “...Send Signal interface...” page 26 paragraphs 0355/0356, “...Signal...” page 27 paragraph 0360) and releases exclusive access of the mailslot (Step 3131/Step 3133 page 26 paragraphs 0355/0356).

35. As to claims 26-30, see the rejection of claim 20 above.

36. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,804,714 B1 to Tummalapalli in view of U.S. Pub. No. 20030037178 A1 to Vessey et al. as applied to claim 22, and further in view of U.S. Pat. No. 7,020,697 B1 to Goodman et al.

37. As to claim 23, Vessey and Tummapalli are silent with reference to the SLA server of claim 22, wherein the content comprises a remote procedure call.

Goodman teaches the SLA server of claim 22, wherein the content comprises a remote procedure call (Col. 84 Ln. 29 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Goodman, Vessey and Tummapalli because the teaching of Goodman would improve the system of Vessey and Tummapalli by providing a protocol the emulates function call mechanisms found in procedural languages (Goodman Col. 84 Ln. 29 – 41).

38. Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 20030037178 A1 to Vessey et al. in view of U.S. Pat. No. 7,020,697 B1 to Goodman et al.

39. As to claim 11, Vessey is silent with reference to the mailbox of claim 10, wherein the content comprises a remote procedure call.

Goodman teaches the mailbox of claim 10 wherein the content comprises a remote procedure call (Col. 84 Ln. 29 – 41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Goodman and Vessey because the teaching of Goodman would improve the system of Vessey by providing a protocol the

Art Unit: 2194

emulates function call mechanisms found in procedural languages (Goodman Col. 84 Ln. 29 – 41).

40. As to claim 17, see the rejection of claim 10 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2194

Charles E Anya
Examiner
Art Unit 2194

cea.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER